

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Kevin John BATEMAN

Serial No. [new]

Filed: [herewith]

For: SYSTEM AND METHOD FOR
DISPLAYING A NUTRITIONAL PROGRAM

CLAIM FOR FOREIGN PRIORITY

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:


The benefit of the filing date of the following prior foreign applications filed in the following foreign country is hereby requested and the right of priority provided in 35 USC 119 is hereby claimed:

New Zealand - Appln. No. 520444 - filed July 30, 2002

New Zealand - Appln. No. 524351 - filed February 24, 2003.

In support of this claim, filed herewith is a certified copy of each said foreign application.

Respectfully submitted,


D. Douglas Price
Reg. No. 24,514

STEPTOE & JOHNSON LLP
1330 Connecticut Ave., NW
Washington, DC 20036
Tel: 202-4296748

CERTIFICATE

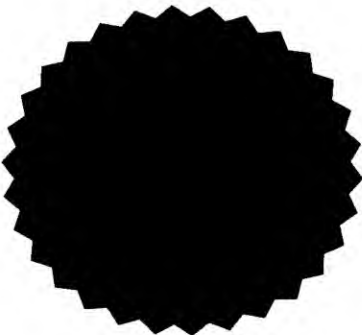
This certificate is issued in support of an application for Patent registration in a country outside New Zealand pursuant to the Patents Act 1953 and the Regulations thereunder.

I hereby certify that annexed is a true copy of the Provisional Specification as filed on 30 July 2002 with an application for Letters Patent number 520444 made by Kevin John Bateman;Carol Elsa Bateman.

Dated 16 July 2003.



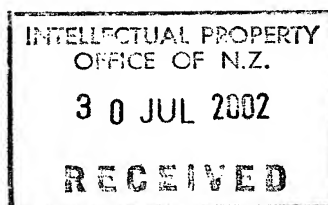
Neville Harris
Commissioner of Patents



5

10

15



Patents Form No. 4

My ref: P02153/B

20

PATENTS ACT 1953

25 **PROVISIONAL SPECIFICATION****System and method for displaying a nutritional program**

30 We, **Kevin John Bateman** and **Carol Elsa Bateman**, both of 148 Normandale Road,
Lower Hutt, New Zealand, and both New Zealand citizens, do hereby declare this invention
to be described in the following statement:

TITLE

System and method for displaying a nutritional program

BACKGROUND THE INVENTION

5 Nutritional programs often require that the macronutrients in food be eaten in specific ratios. For instance in one program it is proposed that food should be eaten with the macronutrients in the ratio of 7 grams protein, 9 grams carbohydrate and 3 grams fat. The difficulty with such programs is that it can be excessively complicated for the person following the program to actually decide whether the food that is to be eaten will fall
10 within the desired ratios. In one method it is proposed that the food be identified by forming movable units which may be coloured or shaped to represent weights and composition of the macronutrients of food. A person can then build blocks from the units and thereby construct a visual representation of the nutritional qualities available in the food that the person desires to eat.

15 It is also known that an advance on the basic system set out above consists in utilising a block system where for instance the amount of any food that contains seven grams of protein is called a unit of protein and the amount of any food that contains nine grams of carbohydrate is called a unit of carbohydrate and the amount of any food that
20 contains three grams of fat is called a unit of fat. The adoption of the block system means that if a person wants a one block snack then they will eat food represented by a one unit of protein food plus one unit of carbohydrate food plus one unit of fat food. This ratio is maintained so that if a person requires more food, then they would eat food that represents a multiple of units of food. For instance a three block meal would mean
25 the person would eat food represented by three units of protein, three units of carbohydrate and three units of fat and so forth.

 Although the block system should be basically quite a simple concept to follow, since it will allow for the calculation of total daily consumption together with meal to
30 meal balance of food, it is recognised that many people have difficulty in understanding the concept.

PRIOR ART

US Patent specification 6,296,488 discloses a diet method in which a plate is formed into a number of compartments each of which would enclose a representation of a specific quantity of food. A number of food cards are provided which display lists of varieties of foods with the foods being listed in specific sections to correspond to the compartments on the plate. The meal cards fit the shape of the compartments so the user can see the food items which may be used to fill the compartments.

US Patent specification 5,683,251 discloses a board which is divided into regions. A number of tokens are provided each of which represent a food or a beverage item selected from a specific food group and which are adapted to stick to the board. The tokens enable a person to track consumption of foods or beverages from the various food and beverage groups by adjusting the number of types of tokens and displaying them in the appropriate regions on the board

OBJECT OF THE INVENTION

It is therefore an object of this invention to provide a display means which can be utilised to enable a user to readily calculate a nutritional program by utilising a unit/block system to identify the macro nutritional components of food.

SUMMARY OF THE INVENTION

In one preferred form the invention may be said to comprise a dietary planning method and apparatus including

a template having at least one row of spaces, each space in a row being identified to signify an amount of carbohydrate nutrient or a protein nutrient or a fat nutrient of a food, and

a plurality of units with each unit being identified to signify a carbohydrate nutrient or a protein nutrient or a fat nutrient of a food

wherein each unit has means to identify a particular food which includes the nutrient signified by the unit and

wherein each unit also represents a specific parameter of the food containing the nutrient.

5 and further wherein the units can be combined to form a block.

Preferably the specific parameter is the number, size or volume of the food.

10 Preferably the units and the spaces on the template are coloured to represent the specific nutrient.

(Preferably the template includes an area for storing the units prior to their being moved onto the spaces on the template.

15 Preferably the area for storing units comprises a plurality of squares which are identified to represent foods and/or macronutrients for foods.

Preferably the spaces on the template are square.

20 Preferably the colours on the units and the spaces on the template are green for carbohydrate, brown for protein and yellow for fat nutrients.

(Preferably the units include identification means to indicate whether the food signified by the unit is favourable, not favourable, or a fair choice.

25 Preferably the template is magnetisable and preferably each unit is magnetic.

DESCRIPTION OF A PREFERRED EMBODIMENT

30 Preferred forms of the invention will now be described with the aid of the accompanying drawings. In all of the figures of the drawings, the horizontal hatching represents a colour such as green, the diagonal hatching represent a colour such as brown and the vertical hatching represents a colour such as yellow. It will however be

understood that the colours selected are essentially arbitrary and the colours referred to herein are given as an example only. In a highly preferred form the colour green may represent carbohydrate nutrients, the colour brown represents protein nutrients and the colour yellow represents fat nutrients. The article depicted in each figure is either a unit or a combination of units and in a highly preferred form of the invention each unit may be a relatively thin structure which is suitably magnetized so the unit may magnetically adhere to a surface. Each unit is preferably of a specific geometrical or non geometrical shape and if the units are in the shapes of squares as illustrated in the drawings, the units can be of two sizes, such as a full size square illustrated in Figures 1 and 2 and a half size rectangle such as illustrated in Figure 3. Units may be positioned contiguously such as illustrated in Figures 4, 5 and 6, to represent a sum of different or combinations of nutrients to form a block as will be further described below.

In accordance with the method of the present invention the colour green represents the carbohydrate content of a food with a nutrient weight of nine grams. The colour brown represents the protein content of a food with a nutrient weight of seven grams and the colour yellow represents a fat content of a food with a nutrient weight of one and a half grams. As it will be realised the weights represented by the coloured units and the physical sizes of the units can vary according to the specific requirements.

To enable ready identification, the units may also include a representation of different foods. For instance the image on the unit illustrated in Figure 1 represents a kiwi fruit 1 and because kiwi fruit contains carbohydrate, the background 2 is green. It will be noted the unit illustrated in Figure 1 includes a tick 3 which signifies that the food is favourable.

The image on the unit illustrated in Figure 2 represents a fish 4 which contains protein and so it is represented on a brown background 5 and because fish is favourable for the diet, the unit also includes a tick 3.

The image on the unit illustrated in Figure 3 are almonds 6 which contain fat and so is represented on a yellow background 7 and because it is a favourable food the unit

includes a tick 3. It will be noted the unit illustrated in Figure 3 is approximately half the width of the unit illustrated in Figures 1 and 2.

Figure 4 illustrates a block formed of a combination of units which represent thirty grams of lean chicken 8. Since chicken contains protein and fat, the representation of a chicken spans a unit of brown background 5 and a half unit of yellow background 7 to represent fat. The protein portion of the chicken is a favourable food and so the unit includes a tick 3, while the fat portion of the chicken is regarded as not favourable and so the unit includes a dot 9 which can for instance be coloured red. Other dots and similar shapes of differing colours can also be employed, such as for instance orange dots to indicate a 'fair choice'.

Figure 5 illustrates a mixed unit depicting a half cup of yoghurt which contains both protein which is represented on a brown background 2 and carbohydrate on a green background 2. Since yoghurt is regarded as favourable, the unit includes a tick 3.

Figure 6 illustrates a 'zone bar™ 12' which is depicted on units having a green background 2, a brown background 5 and a yellow background 7.

The above units illustrate a sample of the many units that can be prepared to signify the various foods that may be eaten and each unit will either show a protein content in seven gram amounts, a carbohydrate content in nine gram amounts or a fat content in one and a half gram amounts or a combination of these nutrients.

To utilise the unit system, a template is provided such as that illustrated at 13 in Figure 7. The template can be in any desired shape such as circular and as illustrated in this Figure, the template will represent a dinner plate. The plate illustrated is known as a three block plate since it has three rows of spaces to represent three sets of blocks. The template is provided with a rectangular outline 14 which is infilled with shapes to represent and equate in size to three sets of units so the infill will have three rows of spaces and therefore have three spaces with green backgrounds 2, three spaces with brown backgrounds 5 and three spaces with yellow backgrounds 7. It will be noted the

spaces to represent the units that have a yellow background 7 include a dividing line 15 to aid the placement of the units having the yellow background which are preferably half the width of the units having the green and brown background.

5 Figure 8 represents typical templates that can be formed for a one block meal, a two block meal and a four block meal.

Figure 9 represents a three block template illustrating the formation of a three block meal which will consist of a half cup of yoghurt 2, nine almonds 6, thirty grams of lean chicken 8 and a kiwi fruit 1. The empty, coloured, spaces are waiting for the units to be positioned on the spaces to complete the construction of a three block meal. In the example illustrated in Figure 9 a combined block representing a half cup of yoghurt 2 is placed on the space in the uppermost row which has a green/brown background and this is balanced by placing two units representing fat on the space on the uppermost row with the yellow background.

In the middle row a unit representing a kiwi fruit 1 is placed on the space with the green background. A unit representing a thirty gram chicken 8 is positioned on the space having the brown background and as illustrated the unit will extend onto the space coloured yellow. The bottom row is empty, waiting to be filled with units having green, brown and yellow backgrounds.

The template also preferably includes further spaces for storing units prior to the units being assembled onto the template. Such spaces can be coloured or otherwise identified to assist in the placement of the units so they can be readily located when required.

By utilising the blocks in conjunction with the template to form blocks and coordinating the background colours of the units to register with the coloured backgrounds on the template, it is possible to construct a meal having the desired balanced diet.

The application of the block system as described above enables a person to see pictures of common foods and the nutrient provided by such foods and then by moving the units onto the appropriate spaces on the template can build up a meal having the desired nutritional and dietary qualities. Consequently the person is able to readily visualize how the diet plan is working because the user is able to select food items from the three groups and move them onto the template until all the spaces are occupied. For instance to plan a three block meal, the user would move any three of the units having green backgrounds to signify carbohydrates onto the green spaces on the template and similarly for the units having the brown and yellow backgrounds.

The highly preferred form of the system as described above will enable user to build a meal using a three block template. It is to be understood that the arrangement of the spaces on the templates can be changed as desired or the template can be designed to enable a user to build a four or more block meal either on the single template or by utilising a number of templates.

While in the above disclosure a method of planning a dietary program is described using a plurality of units signifying either carbohydrate, protein or fat macronutrients or combinations of those macronutrient which can be physically located on a template, it is to be understood the invention also contemplates replacing the units with electronically simulated units which can be located on an electronically simulated template. Such an electronic system can be generated by appropriate electronic programming in a computer with appropriate hardware to generate and display the dietary program.

Having described preferred methods of putting the invention into effect, it will be apparent to those skilled in the art to which this invention relates, that modifications and amendments to various features and items can be effected and yet still come within the general concept of the invention. It is to be understood that all such modifications and amendments are intended to be included within the scope of the present invention.

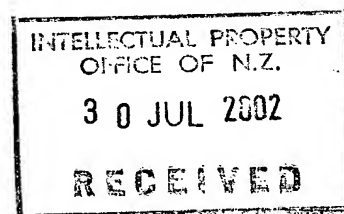


Figure 1

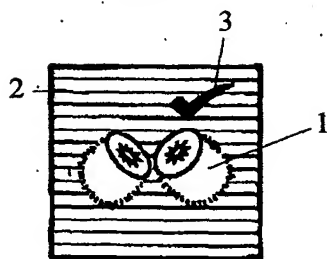


Figure 2

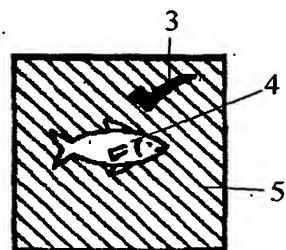


Figure 3

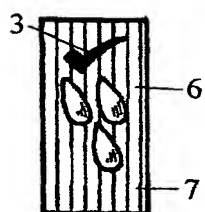


Figure 4

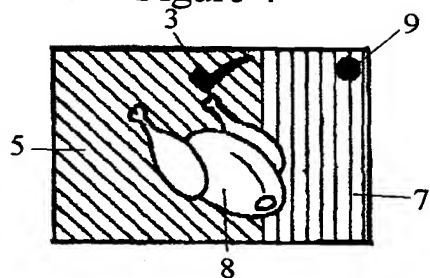


Figure 5

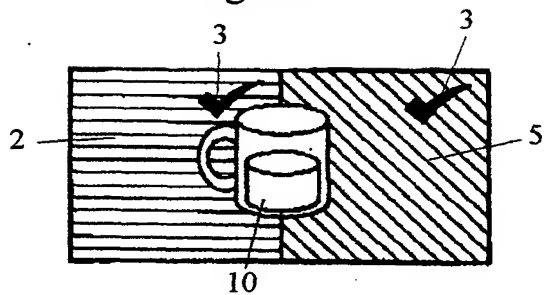


Figure 6

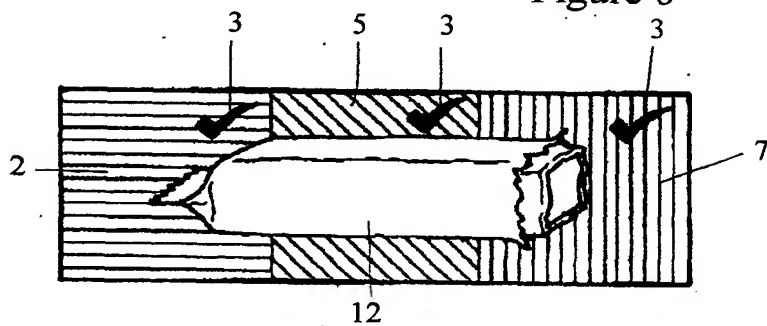


Figure 7

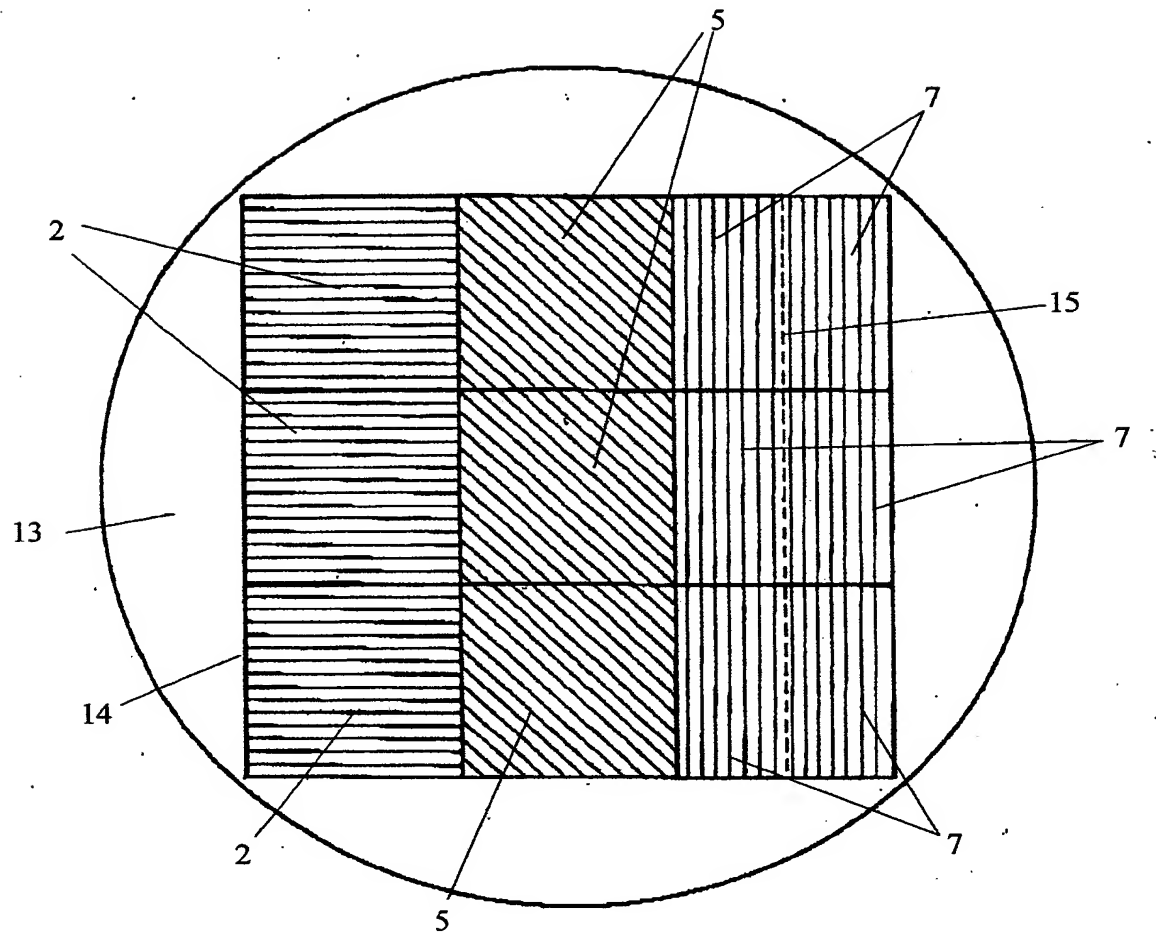


Figure 8

